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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/652,056	08/31/2000	John R. Hind	RSW9-2000-0069-US1	2975

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IBM Corporation
Intellectual Property Law
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EXAMINER

HILLERY, NATHAN

ART UNIT PAPER NUMBER

2176

DATE MAILED: 04/07/2004

3

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/652,056

Applicant(s)

HIND ET AL.

Examiner

Nathan Hillery

Art Unit

2176

-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-14, 19, 20, 32-36, 41, 42 and 44 is/are allowed.
- 6) ☒ Claim(s) 1-9, 15-18, 21-31, 37-40 and 43 is/are rejected.
- 7) ☒ Claim(s) 1-44 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 2176

DETAILED ACTION

1. This action is responsive to communications: IDS filed on 8/31/00.
2. Claims 1 – 44 are pending in the case. Claims 1, 10 – 12, 21 – 23, 32 – 34, 43 and 44 are independent.

Specification

3. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The

Art Unit: 2176

abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

* 5. The abstract of the disclosure is objected to because undue length, and purported merits or speculative applications i.e. words and phrases such as "significantly", lines 4 and 10; "much more efficiently", line 9; "novel", line 15; etc. Correction is required. See MPEP § 608.01(b).

6. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. For example, on page 26, line 14 and page 27, line 12. Applicant is advised that this is not an exhaustive list. Consequently, Applicant is suggested to add left and right brackets or quotation marks on each side of every hyperlink to deactivate each hyperlink or Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 1 – 9 and 43 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claimed invention amounts to nonfunctional descriptive data stored on computer-readable media. Because the claims simply set forth mere arrangements and/or compilations of data on computer-readable media, the claimed invention is non-statutory.

Art Unit: 2176

9. Claims 21 – 31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claimed invention amounts to functional descriptive data. Because the claims are means plus function, the claimed invention is considered software per se in light of the specification (page 16, lines 14 – 17).

Claim Objections

10. Claims 1 – 44 are objected to because of the following informalities: use of parenthetical expressions. For example, line 8 of claim 1; line 12 of claim 10; line 13 of claim 11, etc. Applicant is advised that this is not an exhaustive list. Further, the Office will not consider the contents of any of the parenthetical expressions for purposes of this examination. Appropriate correction of all errors of this type is required.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 4, 7, 15 - 18, 26 – 29, 37 – 40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13. After careful examination of all of the claims, the Office interprets that Applicant meant for claim 7 to depend from claim 4, 17 from 16, 28 from 27, and 39 from 38. However, the Office interprets claim 7 to be identical to claim 4, 18 to 15, 29 to 26, and 40 to 37. Consequently, the Office will consider the identical claims to be substantially similar to each other for purposes of this examination. Further, the Office requires the Applicant to correct the claim dependency for consistency and distinctness. Also, it is

Art Unit: 2176

unclear what document, input or output, is being referenced by the recitation of "the document" in the last line of claims 18, 29 and 40.

Allowable Subject Matter

14. Claims 10 – 14, 19, 20, 32 – 36, 41, 42, and 44 are allowed.

15. Claims 15 – 18 and 37 – 40 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

16. The following is a statement of reasons for the indication of allowable subject matter: When the claims are taken in their totality, they describe a comprehensive method of transforming a document structure, specifically XML, to a compressed document structure, specifically machine-oriented extensible markup language (mXML). The prior art specifically Jamtgaard et al. (US006430624B1) teach that *The data structure containing the content in a relational format in accordance with a preferred embodiment of the invention is a proprietary relational markup language known as RML. RML is an XML based language which has the advantage of permitting the easy mapping of the content into a tree structure by the tree synthesizer 26 so that the tree synthesizer may output a typical document object model (DOM) 28. The DOM is a common object model used to manipulate markup such as HTML such as it disclosed on the W3C web site at <http://www.wc3.org>. Although it is typically used for manipulating HTML or XML, it also provides the tree structure needed by the layout engine as described below during the tree analysis functions. Generally, a tree data structure is a method for representing a hierarchy of data using tree diagrams formed*

Art Unit: 2176

from nodes and line segments between the nodes. This may be a bit confusing because the DOM's tree structure may be used for both its intended purpose of storing the HTML markup contained in atomics, but also as a way of storing relational information about those atomics ... (Column 5, line 54 – Column 6, line 10). However, the claims further describe the aforementioned method of transforming by generating lists and specifications of every type of component in the document structure.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Hillery whose telephone number is (703) 305-4502. The examiner can normally be reached on M - F, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on (703) 305-9792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


JOSEPH FEILD
SUPERVISORY PATENT EXAMINER

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